

CLAIMS

1. A method of receiving data comprising:
performing error correction on received data;
determining if the error correction has failed, the failure of the error correction being determined according to at least one parameter of the received data being changed by the error correction;
determining a CRC value associated with the error corrected received data; and
rejecting received data that has a valid associated CRC value if the error correction has failed.
2. A method according to claim 1, wherein the at least one parameter comprises the number of bits changed in the received data during the error correction.
3. A method according to claim 2, wherein the error correction is determined as having failed when the number of changed bits exceeds a threshold value.
4. A method according to claim 2, wherein the number of changed bits is determined by re-encoding the corrected data and comparing the re-encoded data to the originally received data.
5. A method according to claim 1, wherein the error correction is performed in accordance with a forward error correction code.
6. A method according to claim 1, wherein the received data is rejected if the CRC value is not valid.
7. A method according to claim 1, wherein the received data conforms to a wireless transmission protocol.
8. A method according to claim 1, wherein the received data is in data packet format.

9. A method according to claim 1, wherein the received data comprises at least one Bluetooth™ data packet.

10. A method of testing the validity of data received at a receiver, the method comprising:

- performing an error correction routine on the received data;

- calculating a CRC value from the error corrected received data;

- if the CRC value is valid, determining the number of errors in the received data that have been corrected during the error correction routine; and

- comparing the number of corrected errors with a predetermined threshold value and if the number of corrected errors exceeds the predetermined threshold value rejecting the received data as invalid, regardless of the state of the CRC value.

11. A method of determining the validity of a Bluetooth™ data packet received at a Bluetooth™ enabled receiver, the method comprising:

- decoding the received data packet utilising an error correction decoder to generate an error corrected data packet;

- calculating a CRC value from the error corrected data packet;

- determining the state of the calculated CRC value;

- re-encoding the error corrected data packet;

- comparing the encoded error corrected data packet with the received data packet to determine the number of errors in the received data corrected during decoding; and

- rejecting the received data packet as invalid if the number of determined errors exceeds a threshold value, regardless of the state of the CRC value.

12. A receiver arranged to perform error correction on received data and to determine if said error correction has failed, the receiver having arranged to determine the failure of said error correction in response to at least one parameter of the received data being changed by the error correction, the receiver being further arranged to calculate a CRC value associated with the received data and to reject received data having a valid associated CRC value in response to said error correction having failed.

13. A receiver according to claim 12, wherein the at least one parameter comprises the number of bits changed in the received data during error correction.
14. A receiver according to claim 13, wherein the receiver is arranged for determining that the error correction has failed in response to the number of changed bits exceeding any threshold value.
15. A receiver according to claim 13, wherein the receiver comprises an encoder arranged to re-encode the received data and a data comparator arranged to compare the re-encoded data and the received data, for determining the number of changed bits.
16. A receiver according to claim 12, wherein the receiver is arranged to perform forward error correction.
17. A receiver according to claim 12, wherein the receiver is further arranged to reject the received data if the associated CRC value is not valid.
18. A receiver according to claim 12, wherein the receiver is arranged to receive wireless data transmissions.
19. A receiver according to claim 12, wherein the receiver comprises a BluetoothTM enabled receiver.
20. A receiver comprising:
 - error correction means for correcting errors in a received data packet;
 - error counting means for determining the number of errors in the received data packet corrected by the error correction means;
 - error test means for comparing the number of corrected errors with a predetermined threshold value and for denoting the received data packet as invalid in response to the number of corrected errors being determined to exceed the threshold value;
 - cyclic redundancy check value generating means for calculating a cyclic redundancy check value from the error corrected received data packet; and

means for denoting the received data packet as invalid only if both the cyclic redundancy check value is determined to be valid and the error test means denotes the received data packet as valid.

21. A BluetoothTM enabled receiver comprising:

an error correction decoder for decoding a received data packet utilising error correction;

a re-encoder for re-encoding the decoded data packet;

an error counter for comparing the received data packet and the re-encoded data packet to determine the number of errors in the received data packet corrected by the error correction decoder;

a CRC value calculator for calculating a CRC value from the decoded data packet;

a CRC tester for determining the validity of the CRC value received from the CRC value calculator; and

an error correction tester for determining if the number of errors corrected by the error correction decoder exceeds a predetermined threshold value, the tester being arranged for making the determination in response to the CRC tester determining the CRC value for the data packet being valid, the error correction tester being arranged to reject received data packet if the threshold value is exceeded.

22. A wireless communication enabled device comprising a receiver according to claim 12.

23. A BluetoothTM enabled device comprising a BluetoothTM receiver according to claim 20.